

ABSTRACT

In the conventional network using the PPP stipulated by RFC1661, the LCP phase to establish an LCP link, the authentication phase, and the NCP phase such as address assignment processing of the NCP are sequentially conducted each time the line connection is performed, and hence the connection takes a certain period of time. Particular, in the case of the mobile communication, there is often performed operation in which connection and disconnection are frequently conducted in a short period of time, and hence when the operation up to the connection takes a long period of time, the usability is deteriorated. Therefore, a need exists for a configuration of an apparatus and a communication method to reduce the connection time. In the configuration, control information such as authentication policy and protocols for use beforehand determined in the communication system are set to each apparatus to conduct communication such that the respective processing phases of the LCP, authentication, and NCP processing phases are executed in parallel according to the values set as above. Also, in the configuration, the communication between the apparatuses is conducted using a combined PPP packet created by combining with each other the respective packets of the LCP, authentication, and NCP packets as the PPP packets to be communicated in the respective phases to thereby perform the PPP connection.